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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,196	02/28/2002	Roger Proksch		8618
7590	06/21/2004			
Roger Proksch 206 San Clemente Santa Barbara, CA 93109			EXAMINER NOLAND, THOMAS	
			ART UNIT 2856	PAPER NUMBER

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/087,196

Applicant(s)

PROKSCH, ROGER

Examiner

Thomas P. Noland

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. The RCE request filed January 29, 2004 was acceptable and on RCE has been established for this application.
2. The amendment filed January 29, 2004 has been entered.
3. The drawings were received on January 29, 2004. These drawings are acceptable.
4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claim 1, drawn to a method for determining the derivative of a change in cantilever deflection with respect to a change in a Z position of a cantilever tip without making contact with a surface, classified in class 702, subclass 116.
  - II. Claims 2-7, drawn to a method for determining physical properties of a cantilever, classified in class 73, subclass 1.89.
  - III. Claims 8-14, drawn to a method for use in using cantilever based instruments, classified in class 73, subclass 105.
  - IV. Claims 15-19, drawn to an apparatus for determining cantilever parameters, classified in class 356, subclass 243.3.
5. The inventions are distinct, each from the other because:

Inventions Groups 1-3 considered together and group 4 are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either:

(1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially

different process. (MPEP § 806.05(e)). In this case the process as claimed in groups 1-3 can be practiced by another and materially different apparatus than that of group 4, such as for groups 1-2 not requiring means for applying a drag force on the cantilever, and for group 3 not requiring means for optically monitoring a deflection of the cantilever, etc.

6. Inventions Group 3 and Groups 1-2 are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it does not require determining an inverse optical lever sensitivity as in groups 1-2. The subcombination has separate utility such as use as a cantilever monitoring method without necessarily applying a drag force to a cantilever as in group 3, etc.

7. Inventions Group 2 and Group 1 are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it does not require calculating a resonant frequency and a quality factor of the cantilever from its

power spectrum as evidenced by such only being claimed in dependent claim 5 of group 2, for example. The subcombination has separate utility such as use as a method for determining the derivative of a change in cantilever deflection with respect to a change in Z

position of the cantilever tip without making contact with a surface without oscillating the cantilever through a fluid as in group 2, etc.

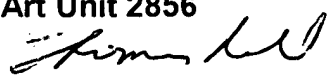
8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

9. Because these inventions are distinct for the reasons given above and the search required for Group 1 is not required for Groups 2-4, etc., restriction for examination purposes as indicated is proper.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Noland whose telephone number is (571) 272-2202. The examiner can normally be reached on weekdays from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Hezron E. Williams, can be reached on (571) 272-2208.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

6/12/04  
**Thomas P. Noland**  
**Primary Examiner**  
**Art Unit 2856**  


Noland/ds

06/14/04